

*C-2  
cont*

- (1) SEQ ID NO:11;
- (2) SEQ ID NO:12;
- (3) SEQ ID NO:13;
- (4) SEQ ID NO:14; and
- (5) SEQ ID NO:15 after His<sup>796</sup> (SEQ ID NO:91);

wherein the numbering is based on the amino acid sequence of SEQ ID NO:55.

REMARKS

By this Office Action, the Examiner has required restriction to one of the following inventions under 35 U.S.C. §121:

Group I.      Claims 21, 22, 24, 26-28, 34-48, 51, 52 and 67, in so far as they are drawn to nucleic acids encoding murine splice variant OB-Ra polypeptide, vectors, host cells and method of producing polypeptide, classified in class 536, subclass 23.5, class 435, subclasses 320.1, 252.3 and 69.1, for example.

Group II.     Claims 21, 22, 24, 26-28, 34-48, 51, 52 and 67, in so far as they are drawn to nucleic acids encoding murine splice variant OB-Rb polypeptide, vectors, host cells and method of producing polypeptide, classified in class 536, subclass 23.5, class 435, subclasses 320.1, 252.3 and 69.1, for example.

Group III.    Claims 21, 22, 24, 26-28, 34-48, 51, 52 and 67, in so far as they are drawn to nucleic acids encoding murine splice variant OB-Rc polypeptide, vectors, host cells and method of producing polypeptide, classified in class 536, subclass 23.5, class 435, subclasses 320.1, 252.3 and 69.1, for example.

Group IV.     Claims 21, 22, 24, 26-28, 34-48, 51, 52 and 67, in so far as they are drawn to nucleic acids encoding murine splice variant OB-Rd polypeptide, vectors, host cells and method of producing polypeptide, classified in class 536, subclass 23.5, class 435, subclasses 320.1, 252.3 and 69.1, for example.

Group V.      Claims 21, 22, 24, 26-28, 34-48, 51, 52 and 67, in so far as they are drawn to nucleic acids encoding murine splice variant OB-Re

polypeptide, vectors, host cells and method of producing polypeptide, classified in class 536, subclass 23.5, class 435, subclasses 320.1, 252.3 and 69.1, for example.

Group VI. Claims 21, 22, 24, 26-28, 34-48, 51, 52 and 67, in so far as they are drawn to nucleic acids encoding murine full-length OB-R polypeptide, classified in class 536, subclass 23.5, class 435, subclasses 320.1, 252.3 and 69.1, for example.

Group VII. Claims 24, 25, 34-48, 51, 52 and 68, in so far as they are drawn to nucleic acids encoding human OB-R polypeptide, vectors, host cells and method of producing polypeptide, classified in class 536, subclass 23.5, class 435, subclasses 320.1, 252.3 and 69.1, for example.

Responsive to the Requirement for restriction, Applicants elect to prosecute the invention of Group V, with traverse, Claims 21, 22, 24, 26-28, 34-48, 51, 52 and 67, which are drawn to nucleic acids encoding murine splice variant OB-Re polypeptide, vectors, host cells, and method of producing polypeptide.

Applicants respectfully request reconsideration of the Requirement for Restriction, or in the alternative, modification of the Restriction Requirement to allow prosecution of more than one group of Claims designated by the Examiner in the present Application, for the reasons provided as follows.

Under 35 U.S.C. §121 "two or more independent and distinct inventions ... in one Application may ... be restricted to one of the inventions." Inventions are "'independent'" if "there is no disclosed relationship between the two or more subjects disclosed" (MPEP 802.01). The term "'distinct'" means that "two or more subjects as disclosed are related ... but are capable of separate manufacture, use or sale as claimed, AND ARE PATENTABLE OVER EACH OTHER" (MPEP 802.01) (emphasis in original). However, even with patentably distinct inventions, restriction is not required unless one of the following reasons appear (MPEP 808.02):

1. Separate classification
2. Separate status in the art; or
3. Different field of search.

Further, under Patent Office Examining Procedures, "[i]f the Search and Examination

of an entire Application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to distinct or independent inventions" (MPEP 803, Rev. 8, May 1988) (emphasis added).

Applicants respectfully submit that the groups designated by the Examiner fail to define compositions and methods, with properties so distinct as to warrant separate Examination and Search. In particular, Claims 21, 22, 24, 26-28, 34-48, 51, 52 and 67 of Group V, which are drawn to nucleic acids encoding murine splice variant OB-Re polypeptide, vectors, host cells, and method of producing polypeptide are fundamentally related to the claims of Groups I, II, III and IV, drawn similarly to Claims 21, 22, 24, 26-28, 34-48, 51, 52 and 67, as they relate to nucleic acids encoding murine splice variants OB-Ra, OB-Rb, OB-Rc and OB-Rd, respectively. The search for any of the nucleic acids separately classified by the Examiner as the invention of Group V would require an additional search of the identical classes wherein the nucleic acids of each and any of Group I, Group II, Group III and Group IV are also classified, thus resulting in a duplicate search for the same material. Thus, Applicants submit that the Search and Examination of the entire Application, or, at least, of Group V with Groups I, II, III and IV can be made without serious burden, and therefore the Examiner must examine all of the claims of the Application on the merits.

The Examiner's assertions to the contrary notwithstanding, Applicants respectfully submit that conjoint examination and inclusion of all of the Claims of the present Application would not present an undue burden on the Examiner, and accordingly, withdrawal of the Requirement for Restriction, or, at the least, modification to include the Claims drawn to Group V along with Groups I, II, III and IV is in order. Further, in the event the Examiner should find the elected species free of art and patentable, Applicants respectfully request and reserve the right to broaden the election.

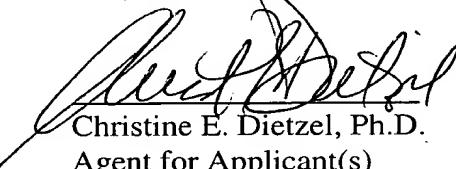
Responsive to the Examiner's requirement and Notice to Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Nucleic Acid Sequence Disclosures, Applicants submit have above amended the Specification and Claims to appropriately and correctly refer to SEQ IDs and particularly in order that any sequence that is made up of one or more noncontiguous segments of a larger sequence or segments from different sequences is presented as a separate sequence. The above amendments provide no

new matter and are merely references to the appropriate SEQ IDs in order that the claimed nucleic acids are clear and refer to separate sequences as required and appropriate. Applicants submit concurrently herewith a substitute computer readable form (CRF) and paper copy of the Sequence Listing as well as a Statement in Support of the filing of a Sequence Listing. Applicants respectfully request and direct entry of the attached paper copy of the Sequence Listing in the Specification.

No fees are believed to be further necessitated by the foregoing Response. However, should this be erroneous, authorization is hereby given to charge Deposit Account No. 11-1153 for any underpayment, or credit any overages.

In view of the above, withdrawal of the Requirement for the Restriction is requested, and an early action on the merits of the Claims is courteously solicited.

Respectfully submitted,



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**Version With Markings To Show Changes Made**

27. (Amended) The DNA molecule of claim 24 which codes on expression for a polypeptide selected from the group consisting of:

- a) a leptin receptor selected from the group consisting of OB-Ra (SEQ ID NO:2), OB-Rb (SEQ ID NO:4), OB-Rc (SEQ ID NO:6), OB-Rd (SEQ ID NO:8), and OB-Re (SEQ ID NO:10), or allelic variants thereof;
- b) a leptin receptor selected from the group consisting of:
  - x. N-terminal corresponding to OB-Ra through Lys<sup>889</sup> and C-terminal corresponding to a C-terminal selected from the group consisting of OB-Rb after Lys<sup>889</sup> (SEQ ID NO:57), OB-Rc after Lys<sup>889</sup> (SEQ ID NO:58), and OB-Rd after Lys<sup>889</sup> (SEQ ID NO:59);
  - xi. N-terminal corresponding to OB-Rb or OB-Rc through Lys<sup>889</sup>, and C-terminal corresponding to OB-Ra after Lys<sup>889</sup> (SEQ ID NO:60,61) or OB-Rd after Lys<sup>889</sup> (SEQ ID NO:62,63);
  - xii. N-terminal corresponding to OB-Rd through Lys<sup>889</sup>, and C-terminal corresponding to OB-Ra after Lys<sup>889</sup> (SEQ ID NO:64), OB-Rb after Lys<sup>889</sup> (SEQ ID NO:65), or OB-Rc after Lys<sup>889</sup> (SEQ ID NO:66);
  - xiii. N-terminal corresponding to SEQ ID NO:55 from Pro<sup>664</sup> to Lys<sup>889</sup>, and C-terminal corresponding to OB-Ra after Lys<sup>889</sup> (SEQ ID NO:67), OB-Rb after Lys<sup>889</sup> (SEQ ID NO:68), OB-Rc after Lys<sup>889</sup> (SEQ ID NO:69), and OB-Rd after Lys<sup>889</sup> (SEQ ID NO:70);
  - xiv. N-terminal corresponding to SEQ ID NO:55 from Met<sup>733</sup> to Lys<sup>889</sup>, and C-terminal corresponding to OB-Ra after Lys<sup>889</sup> (SEQ ID NO:71), OB-Rb after Lys<sup>889</sup> (SEQ ID NO:72), OB-Rc after Lys<sup>889</sup> (SEQ ID NO:73), and OB-Rd after Lys<sup>889</sup> (SEQ ID NO:74);
  - xv. N-terminal selected from the group consisting of OB-Ra, OB-Rb, OB-Rd, and SEQ ID NO:55 from Pro<sup>664</sup>, through His<sup>796</sup>, and OB-Re from

His<sup>796</sup> SEQ ID NO:75,76,77 and 78);

xvi. N-terminal corresponding to SEQ ID NO:55 from Met<sup>733</sup> to His<sup>796</sup>, and OB-Re from His<sup>796</sup> (SEQ ID NO:79), and

viii. allelic variants of any of subparts i) through vii) above;

c) a leptin receptor wherein

xvii. the N-terminal sequence is selected from the group consisting of

- (1) amino acid residues 1-889 (SEQ ID NO:80);
- (2) amino acid residues 23-889 (SEQ ID NO:81);
- (3) amino acid residues 28-889 (SEQ ID NO:82);
- (4) amino acid residues 133-889 (SEQ ID NO:83);
- (5) amino acid residues 733-889 (SEQ ID NO:84);
- (6) amino acid residues 1-796 (SEQ ID NO:85);
- (7) amino acid residues 23-796 (SEQ ID NO:86);
- (8) amino acid residues 28-796 (SEQ ID NO:87);
- (9) amino acid residues 28-796 preceded by an N-terminal Asp-Pro dipeptide (SEQ ID NO:88);

(10)[(9)] amino acid residues 133-796 (SEQ ID NO:89);

(11)[(10)] amino acid residues 733-796 (SEQ ID NO:90); and

(12)[(11)] allelic variants of any of subparts (1) through (10) above; and

xviii. the C-terminal sequence is selected from the group consisting of

- (1) SEQ ID NO:11;
- (2) SEQ ID NO:12;
- (3) SEQ ID NO:13;
- (4) SEQ ID NO:14; and
- (5) SEQ ID NO:15 after His<sup>796</sup> (SEQ ID NO:91);

wherein the numbering is based on the amino acid sequence of SEQ ID NO:55.